



Fig. 1

```
SMEZ ----- LEVDN NSLLR NIYSTIVY EY SDTVIDE KTS 30
SMEZ-2 ----- LEVDN NSLLR NIYSTIVY EY SDIVID E KTS 30
SPE-J -----
SPE-C -----DSKK DISNVKSD LL YAYTITPYDY KDCRVN E STT 34
SPE-G -----DE NLKDLKRS LR FAYNITPCDY ENVEIA E VIT 32
SPE-H -----NSYN TTNRH NLESL YKHDSNLIEA DSIKN SPDIV 34
SEA      SEKSEEINE KDLRKKSELO GAALG NLKQI YYYNEKAKTE NKESH DQFLO 49
```

$\alpha 2$

$\beta 1$

```
SMEZ      ENLVTKKLDV RDARDFFIN S EMDEYAAND E KDGDKIAMFS VPFDWNYLSE 80
SMEZ-2    ENLVTKKLDV RDARDFFIN S EMDEYAAND E KTGDKIAMFS VPFDWNYLSK 80
SPE-J     ----- LE....YIFT 6
SPE-C     HTLNIDTQKY RG.KDYIYS EMSYEASQKF KRD EVDVFG IF....YILN 79
SpeG      NSIHINTKQK RSECILYVDS IVSLGITDQF IKGDKVDVFG LP....YNFS 78
SpeH      TS.HML..KY .SVK CKNLSV FFEKDWISQE FKDK EVDIYA I SAQEVCE.. 78
SEA       HTILFKGFFT NHSWYNDLLV DFDSKDIVDK YK CKKVDLYG AYYGYQCAGG 99
```

$\beta 2$

$\beta 3$

$\alpha 3$

$\beta 4$

```
SMEZ      GKVIAY.TY G GMPYQEE.. PMSKNI FVNI WINRR CIPVF YNQISTNKTT 127
SMEZ-2    GKVTAY.TY G GITPYQKT.. SILKNI FVNI WINGKQISVF YNEISTNKTT 127
SPE-J     RYDVY.Y.Y G GVTSPVNSN. SENSKIVGNL LIDGVQCKTL INPIKIDKPI 54
SPE-C     SHTGEY.Y.Y G GLTPAQN.N. KVNHKLLGNL FISCESQONL NKKIILEKDI 126
SPE-G     PPYVDN.Y.Y G GIVKHSNQG. NKSLOFVGIL NODGKETYIF SEAVRIKAKQ 126
SPE-H     CPGKR YEAFG GILTNSEK. .KEIKV EGVNV WDKSKQO..P PMFITVNKPK 124
SEA       TPNKTACMYG C VLLHDNNRL TEEKRVEINI WLLGKONTVE LETVKTNNKN 149
```

$\beta 5$

$\beta 6$

$\beta 7$

$\beta 8$

```
SMEZ      VTAQEDIDKV RKFLISQHQL YSSGSSYKSG KLVFPHNDNS DKYSIDL EYV 177
SMEZ-2    VTAQEDIDKV RKFLIAQHQL YSSGSSYKSG KLVFPHNDNS DKYSFDL EYV 177
SPE-J     FTIQEEDFKI RQYLMQTKKI YDPN SFYIKG QIEIAINGNK .HESFNLYDA 103
SPE-C     VTQOEDIDKI RKYLMDNYKI YDATSPYVSG RIEIGAKDGK .HEQIDLEDS 175
SPE-G     FTIQEEDFKI RKFLMEKYNL YDSESFYTSC SIFLAIKDSK .HYEVDLENK 175
SPE-H     VTAQEVIDKV RKLLIKKYDI YNNR..EQKY SKGTV LIDLN SGKDIVFDLY 172
SEA       VTAQELDLQA RRYLQEKYNL YNSDVFDGKV QRGLIVFHTS TEP SVNYDLF 199
```

$\beta 8$

$\alpha 4$

$\beta 9$

$\beta 10$

```
SMEZ      ..GYRDKE SI FKVKDNKSF NIDKIGHLL I EIDS 209
SMEZ-2    ..GYRDKE SI FKVKDNKSF NIDKIGHLL I EIDS 209
SPE-J     TSS.STRSD I FKVKDNKSI NMKDFSHFI I YLWTK 137
SPE-C     PNE.GTRSD I FKVKDNRII NMKNFSHFI I YLEK 208
SPE-G     DDKLLSRD SF FKVKDNKIF NSEEISHFI I YLKTH 210
SPE-H     YFGNGDFN SM LKYSNNERI DSTQF.HVIV SIS 204
SEA       GAQQGNSNTL LRI YRDNKT I NSENH.HII I YLYTS 233
```

$\alpha 5$

$\beta 11$

$\beta 12$



FIG 2

10 30 50  
ATGAAAAAACAACAACTTATTTTTCTTTTACTTCAATATTCATTGCAATAATTTCTCGT  
M K K T K L I F S F T S I F I A I I S R

70 90 110  
CCTGTGTTTGGATTAGAGTAGATAATAATTCCTTCTAAGGAATATCTATAGTACGATT  
P V F G L E V D N N S L L R N I Y S T I

130 150 170  
GTATATGAATATTCAGATATAGTAATTGATTTTAAAACAGTCATAACTTAGTACTAAG  
V Y E Y S D I V I D F K T S H N L V T K

190 210 230  
AAACTTGATGTTAGAGATGCTAGAGATTTCTTTATTAACCTCCGAAATGGACGAATATGCA  
K L D V R D A R D F F I N S E M D E Y A

250 270 290  
GCCAATGATTTTAAAACCTGGAGATAAAATAGCTGTGTTCTCCGTCCCATTGATTGGAAC  
A N D F K T G D K I A V F S V P F D W N

310 330 350  
TATTATCAAAAGGAAAAGTCACAGCATATACCTATGGTGAATAACACCCTACCAAAAA  
Y L S K G K V T A Y T Y G G I T P Y Q K

370 390 410  
ACTTCAATACCTAAAAAatCCCTGTTAATTTATGGattaatGgAAACcagatCTCTgtt  
T S I P K N I P V N L W I N G K Q I S V

430 450 470  
CcTtaCaaCGAAATATCaaCTAACAACAAACAacaGTTACAGCTCAAGAAattgATCTAAAG  
P Y N E I S T N K T T V T A Q E I D L K

490 510 530  
GTTAGAAAATTTTAAATAGCACAACATCAATTATATTCTTCTGGTTCTAGCTACAAAAGT  
V R K F L I A Q H Q L Y S S G S S Y K S

550 570 590  
GGTAGACTGGTTTTTCATACAAATGATAATTCAGATAAATATTCTTTGatcTTTTctat  
G R L V F H T N D N S D K Y S F D L F Y

610 630 650  
gtagGATATAGAGATAAAGAAAGTATCTTTAAAGTATACAAAGACAATAAATCTTTCAAT  
V G Y R D K E S I F K V Y K D N K S F N

670 690  
ATAGATAAAATGGGCATTTAGATATAGAAATTGACTCCTAA  
I D K I G H L D I E I D S \*



SPE-G

FIG 3

```
10          30          50
ATGAAACAAACATTTTGACAATTATCATATTATCATGTGTTTTAGCTATGGAAGTCAA
M K T N I L T I I I L S C V F S Y G S Q

30          60          90
TTAGCTTATGCAGATGAAAATTTAAAAGATTTAAAAGAAGTTAAGATTTGCCTATAAT
L A Y A D E N L K D L K R S L R F A Y N

60          90          120
ATTACCCCATGCGATTATGAAAATGTAGAAATTGCATTGTACTACAAATAGCATACAT
I T P C D Y E N V E I A F V T T N S I H

90          120          150
ATTAATACTAAACAAAAAGATCGGAATGTATTCTTTATGTTGATTCTATTGTATCTTTA
I N T K Q K R S E C I L Y V D S I V S L

120          150          180
GGCATTACTGATCAGTTTATAAAAGGGGATAAGGTCGATGTTTTGGTCTCCCTTATAAT
G I T D Q F I K G D K V D V F G L P Y N

150          180          210
TTTTCCCCACCTTATGTAGATAATATTATGGTGGTATTGTAAAACATTCTGAATCAAGGA
F S P P Y V D N I Y G G I V K H S N Q G

180          210          240
AATAAATCATTACAGTTTGTAGGAATTTTAAATCAAGATGGGAAAGAACTTATTGCCC
N K S L Q F V G I L N Q D G K E T Y L P

210          240          270
TctgAGGCTGTTTCGCATAAAAAAGAAACAGTTTACTTTACAGGAATtgATTTTAAATA
S E A V R I K K K Q F T L Q E F D F K I

240          270          300
AGAAAAATTTCTAATGGAAAAATACAATATCTATGATTTCGGAATCGCGTTATACATCGGGG
R K F L M E K Y N I Y D S E S R Y T S G

270          300          330
AGCCTTTTCCTTGCTACTAAAGATAGTAAACATTATGAAGTTGATTATTTAATAAGGAT
S L F L A T K D S K H Y E V D L F N K D

300          330          360
GATAAGCTTTTAAAGTCGAGACAGTTTCTTTAAAAGGTATAAAGATAATAAGATTTTAAAT
D K L L S R D S F F K R Y K D N K I F N

330          360          390
AGTGAAGAAATTAGTCATTTTGATATCTACTTAAAAACGCACTAG
S E E I S H F D I Y L K T H *
```



SPE-H

FIG 4

```
10          30          50
ATGAGATATAATTGTCGCTACTCACATATTGATAAGAAAATCTACAGCATGATTATATGT
M R Y N C R Y S H I D K K I Y S M I I C

70          90          110
TTGTCATTCTTTTATATTCCAATGTTGTTCAAGCAAATTCTTATAATACAACCAATAGA
L S F L L Y S N V V Q A N S Y N T T N R

130         150         170
CATAATCTAGAATCGCTTTATAAGCATGATTCTAACTTGATTGAAGCCGATAGTATAAAA
H N L E S L Y K H D S N L I E A D S I K

190         210         230
AATTCTCCAGATATTGTAACAAGCCATATGTTGAAATATAGTGTCAAGGATAAAAATTG
N S P D I V T S H M L K Y S V K D K N L

250         270         290
TCAGTTTTTTTTTGAGAAAGATTGGATATCAGGAATTCAAAGATAAAGAAGTAGATATT
S V F F E K D W I S Q E F K D K E V D I

310         330         350
TATGCTCTATCTGCACAAGAGGTTTGTGAATGTCCAGGAAAAGGTATGAAGCGTTtggt
Y A L S A Q E V C E C P G K R Y E A F G

370         390         410
GGAATTACATTAACATAATTGAGAAAAAAGAAATTAAAGTTCCTGTAAACGtgtGggat
G I T L T N S E K K E I K V P V N V W D

430         450         470
AAAAGTAAACAACAGCCGCTATGTTTATTACAGTCAATAAACCGAAagtaaCCGCTCAG
K S K Q Q P P M F I T V N K P K V T A Q

490         510         530
GAAGTGGATATAAAAGTTAGAAAGTTATTGAttaagaaatagATATCTATAATAaccgg
E V D I K V R K L L I K K Y D I Y N N R

550         570         590
gaacaaaaataactctaaaggaactgttaccttagATTTAAATTCAGGTAAAGATATTGTT
E Q K Y S K G T V T L D L N S G K D I V

610         630         650
TTTGATTGTATTATTTTGGCAATGGAGACTTTAATAGCATGCTAAAAATATATTCCAAT
F D L Y Y F G N G D F N S M L K I Y S N

670         690         710
AACGAGAGAATAGactcaactCAATTTCTGTAGatgTGTCaatcagctaA
N E R I D S T Q F H V D V S I S *
```



SPE-J (partial)

FIG 5

```

      10              30              50
CTTCCGTACATATTTACTCGTTATGATGTTTATTATATATATGGTGGGGTTACACCATCA
L P Y I F T R Y D V Y Y I Y G G V T P S

      70              90              110
GTAAACAGTAATTCGGAAAATAGTAAAATTGTAGGTAATTTACTAATAGATGGAGTCCAG
V N S N S E N S K I V G N L L I D G V Q

      130             150             170
CAAAAAACACTAATAAATCCCATAAAAATAGATAAACCTATTTTACGATTCAAGAATTT
Q K T L I N P I K I D K P I F T I Q E F

      190             210             230
GACTTCAAAATCAGACAATATCTTATGCAAACATACAAAATTTATGATCCTAATTCTCCA
D F K I R Q Y L M Q T Y K I Y D P N S P

      250             270             290
TACATAAAAGGGCAATTAGAAATTGCGATCAATGGCaATAAACATGAAAGTTTAACTTA
Y I K G Q L E I A I N G N K H E S F N L

      310             330             350
TATGATGCAACCTCATCTAGTACAAGGAGTGATATTTTAAAAAATATAAGACaATAAG
Y D A T S S S T R S D I F K K Y K D N K

      370             390             410
ACTATAAATATGAAAGATTTTCAGCCATTTTGATATTTACCTTtggACTAAATAA
T I N M K D F S H F D I Y L W T K *
```

FIG 6

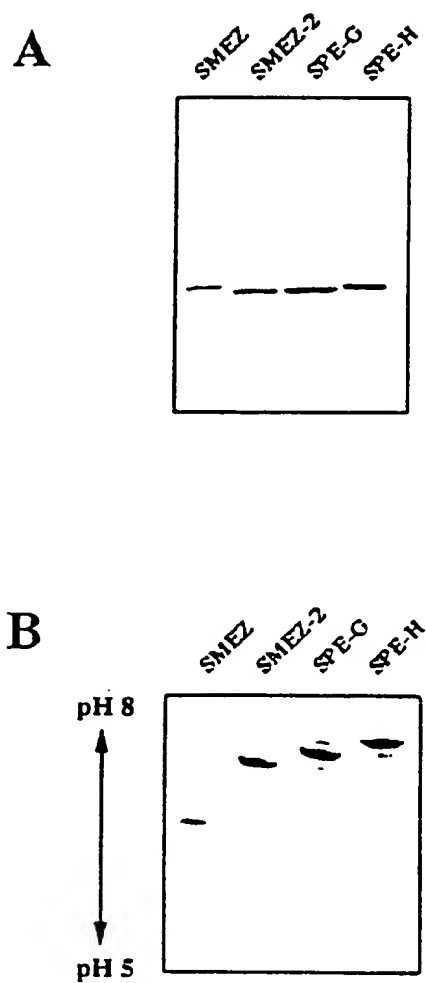




FIG 7

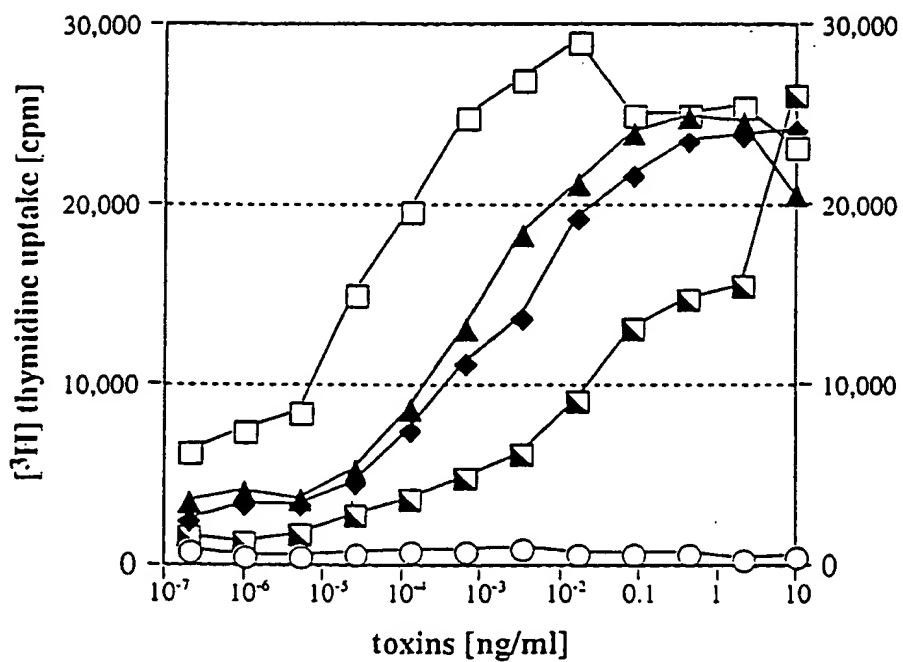




FIG 8

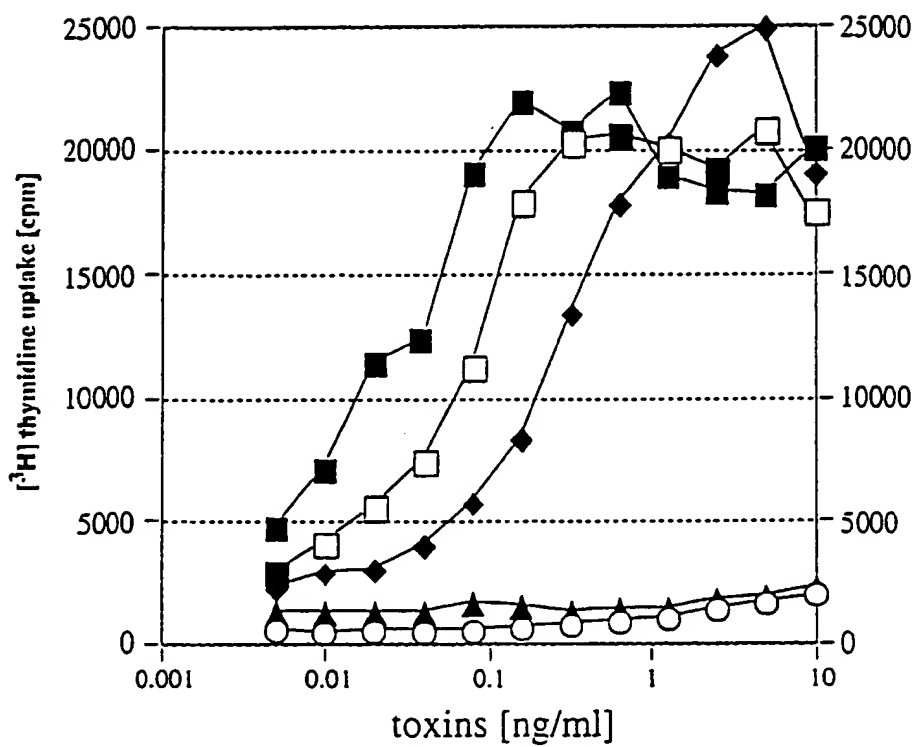






FIG 9

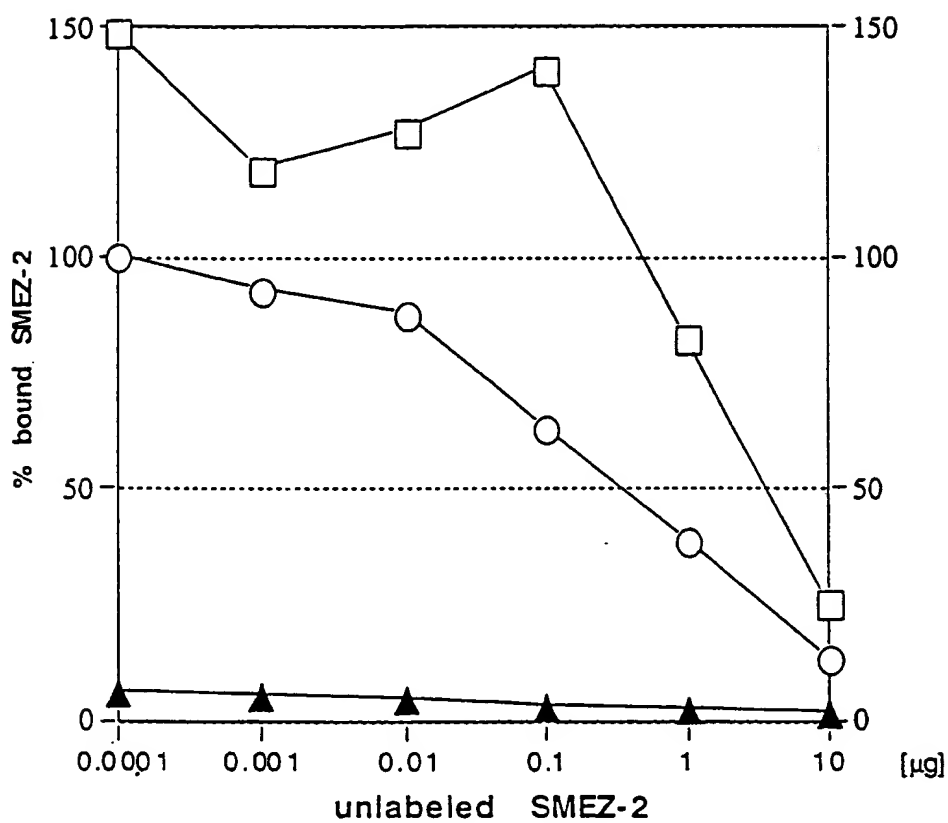




FIG 10

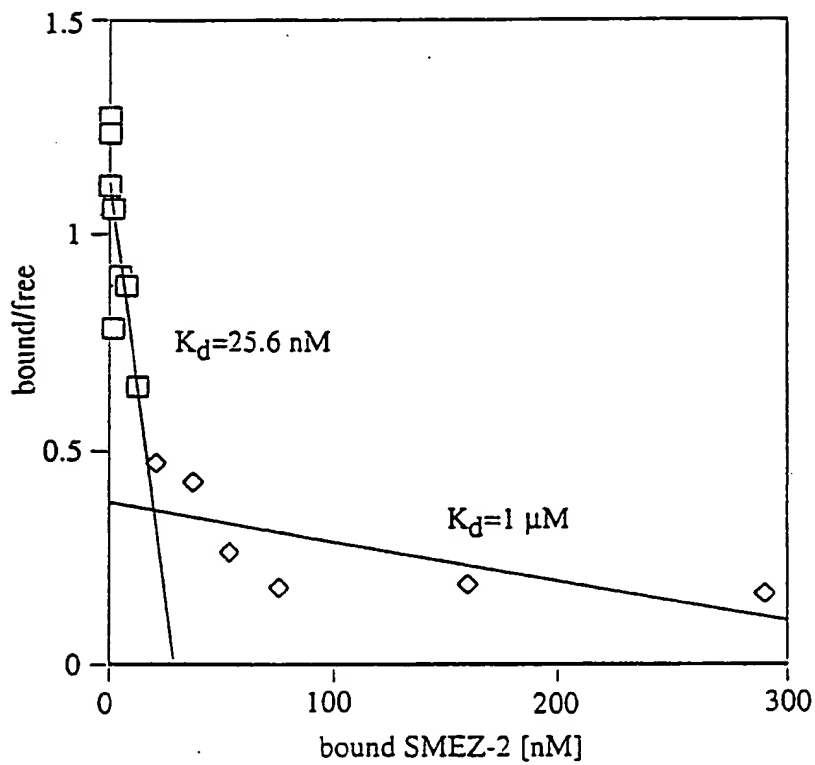




Fig. 11

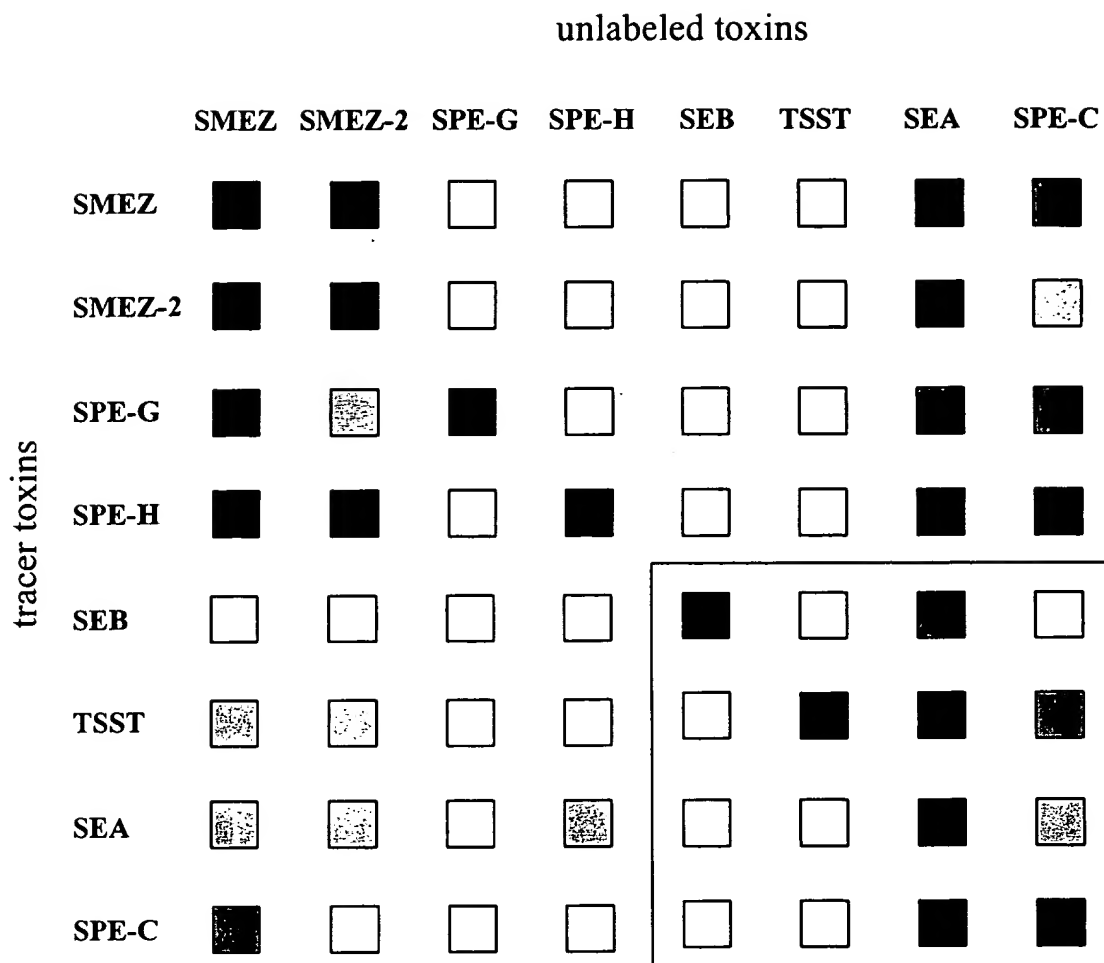
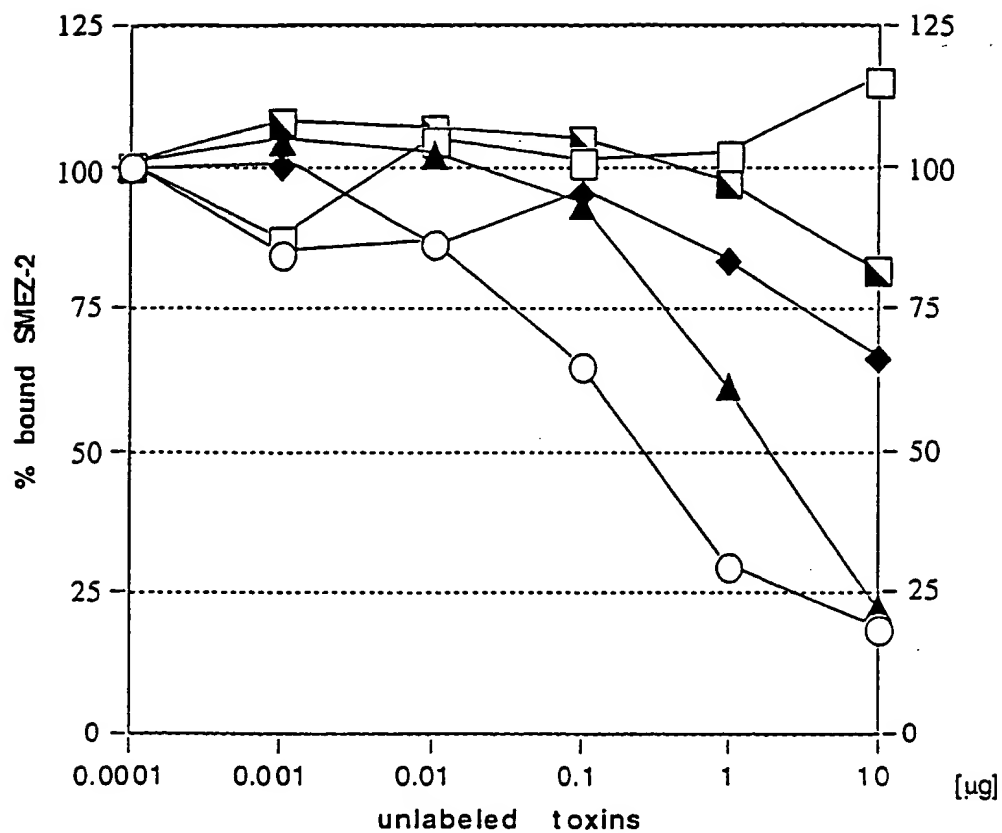




FIG 12



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FIG 13

